

What is claimed is:

1. A Policy Decision Function (PDF) implemented in a mobile network to determine a maximum authorized traffic class for a given media flow of a session between two mobile terminals, or between a mobile terminal and a server, comprising:

determining if a media stream requiring the highest traffic class within a plurality of media streams is removed from a session, when the session established is modified between two mobile terminals or between a mobile terminal and a server, via a communication link; and

maintaining the existing traffic class for the remaining media streams for the session, if the media stream requiring the highest traffic class is removed from the session.

2. A Policy Decision Function (PDF) implemented in a mobile network to determine a maximum authorized traffic class for a given media flow of a session between two mobile terminals or between a mobile terminal and a server, comprising:

determining if a unidirectional stream is added to a session comprising a bi-directional stream, when the session is established or modified between two mobile terminals or between a mobile terminal and a server, via a communication link; and

applying the highest traffic class, allocated to any of media streams of the session, to all media streams of the session during the lifetime of the session, if the unidirectional stream is added to the session comprising the bi-directional stream.

3. An IP Multimedia Subsystem (IMS) architecture for IP multimedia services, comprising:

mobile terminals;

a gateway support node (GGSN) configured to handle packet transmission to/from the mobile terminals during a session; and

a proxy call session control function (P-CSCF) configured to serve as a first contact point of the mobile terminals and provide session management services during the session, including establishing a packet data protocol (PDP) context for IMS related signaling, registration, and other procedures for the session,

wherein said P-CSCF comprises a Policy Decision Function (PDF) configured to perform the following:

determining if a media stream requiring the highest traffic class within a plurality of media streams is removed from the session, when the session established is being modified between two mobile terminals or between a mobile terminal and a server, via a communication link; and

maintaining the used traffic class for the remaining media streams for the session, if the media stream requiring the highest traffic class is removed from the session.

4. A computer readable medium comprising instructions that, when executed by a mobile network, perform a method of determining a maximum authorized traffic class for a given media flow of a session between two mobile terminals, or between a mobile terminal and a server, said method comprising:

determining if a unidirectional stream is added to a session comprising a bi-directional stream, when the session is established or modified between two mobile terminals, or between a mobile terminal and a server, via a communication link; and

applying the highest traffic class, allocated to any of media streams of the session, to all media streams of the session during the lifetime of the session, if the unidirectional stream is added to the session comprising the bi-directional stream.